Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Homeroom\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group Members: 1.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Insulator Assessment

**Hypothesis:** Which cup do you believe is going to keep the hot chocolate the warmest for the longest time period and why? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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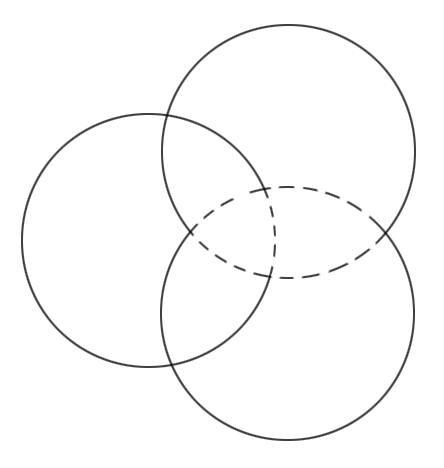
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Experiment: Measure the temperature of the hot water in Celsius.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name: | Start | 5 min. | 10 min. | 15 min. | 30 min. | 1 Hour |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

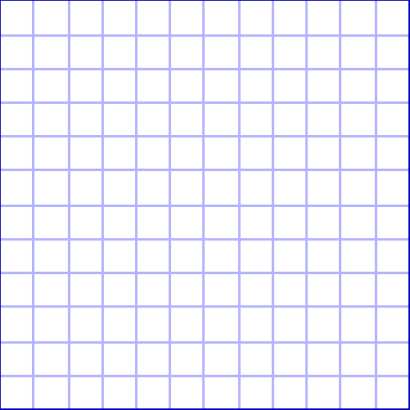
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 |
|  | No data recorded, unable to read thermometer without support | Records temperatures on chart, but does not use the Celsius scale. | Records most temperatures correctly, using the correct scale. | Records all temperatures correctly, with correct labels. |

**Observation:**

[](http://heasarc.gsfc.nasa.gov/docs/xte/learning_center/ASM/journey/gifs/venn.gif)**Compare and contrast the three insulators.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** |
| **Venn Diagram** | * No title * Circles are not labeled * Circles are left empty | * Labels present * One of the labels or the title is missing. * Limited information listed | * Diagram labeled * Title is included * Small errors in spelling * 1-2 similarities listed for two of the three insulators. | * All axes and titles labeled * Correctly numbered * Correctly spelled * Detailed similarities and differences identified |

Construct a line graph showing the results of the experiment. Graph all three sets of data. Make sure to include all of the required parts to your graph.



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **1** | **2** | **3** | **4** |
| **Graph Labels** | * No title * No axes labeled | * Graph label present * One of the labels or the title is missing. | * Graph is labeled * Title is included * Small errors in spelling or numbering | * All axes and titles labeled * Correctly numbered * Correctly spelled |
| **Graph Scale** | * No graph scale on either axis | * Graph scale included on one axis but no on the other | * Graph scale included on both axes * Contains errors in increments | * Graph scale is included on both axes * All increments are correct and consistent |
| **Data Points** | * Disorganized and cluttered * Difficult to understand | * Data points displayed * All points plotted incorrectly | * Data points displayed * 3-5 points incorrectly plotted | * Data points displayed * 1-2 points incorrectly plotted |

**Conclusion:**

Write a conclusion about the experiment.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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